इंटरनेट मानक

## Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

"जानने का अधिकार, जीने का अधिकार"
Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

"पुराने को छोड नये के तरफ"
Jawaharlal Nehru
"Step Out From the Old to the New"

IS 9330 (1979): Terminology for parameters of waste heat boilers and boilers for special purposes [MED 1: Boilers and Pressure Vessels]

"ज्ञान से एक नये भारत का निर्माण"
Satyanarayan Gangaram Pitroda
"Invent a New India Using Knowledge"

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

"ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है"
Bhartṛhari—Nītiśatakam
"Knowledge is such a treasure which cannot be stolen"

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

UDC 621·181·62-97/-98 : 001·4

**IS : 9330 - 1979**

*Indian Standard*

(Reaffirmed 2001)

# TERMINOLOGY FOR PARAMETERS OF WASTE HEAT BOILERS AND BOILERS FOR SPECIAL PURPOSES

**1. Scope** — Covers the terminology for parameters of waste heat boilers and boilers for special purposes. Terminology for parameters of general stationary steam boilers is covered in a separate standard IS : 8595-1977 'Terminology for parameters of stationary steam boilers'.

## 2. Terminology

**2.1** *Basic Parameters of Boilers* — Pressure of main steam, temperature of main steam, temperature of feed water, process gas quantity, pressure of gas, inlet temperature of gas, composition and specific heat of gas quantity and quality of particulate matter in gas and source of heat input are the basic parameters of the boilers.

**2.2** *Maximum Continuous Rating* ( *MCR* ) — Maximum steam output in tonnes/hour ( gross ) which the boiler should give continuously for not less than 72 hours while maintaining the specified values of basic parameters.

**2.3** *Gas Quantity* — It is the quantity of gas in kg/s or $m^3/s$ at N. T. P., that is, entering the boiler.

**2.4** *Pressure of Gas* — Pressure of the gas ( gauge ) at the inlet to the boiler. This is measured at the place where the gas enters the boiler.

**2.5** *Inlet Temperature of the Gas* — Temperature of the gas at the inlet of the boiler.

**2.6** *Exit Temperature of the Gas* — The temperature of the gas at the exit of the boiler, that is, where it leaves the last heat transfering surface.

**2.7** *Gas Composition* — The composition of gas entering the boiler in percentage, by volume.

**2.8** *Pressure of Main Steam* — Pressure of the main steam ( gauge ) at the boiler outlet. It shall be measured before the main steam stop valve of the boiler. In the absence of the main steam stop valve, it is measured at the superheater outlet header of the boiler. In case of boilers without superheaters, the pressure is that of saturated steam.

**2.9** *Temperature of Main Steam* — Temperature of steam at the outlet of the boiler. It is measured at a place as close as practicable where the pressure of the main steam is measured.

**2.10** *Temperature of Feed Water* — Temperature of feed water at inlet to the boiler. In the case of boilers without economiser, it shall be measured before entry to the boiler drum. In case feed water passes through surface type attemporator or drum type water heater, the temperature shall be measured at inlet to the attemporator or feed heater.

**2.11** *Specified Values of Basic Parameters* — The values of the basic parameters specified to be maintained at maximum continuous rating of the boiler.

**2.12** *Maximum Pressure of Main Steam* — The lowest pressure ( gauge ) at which the safety valve connected immediately after the superheat is set to blow. If the boiler has no superheater then the maximum pressure shall be taken to be equal to the lowest pressure at which a drum safety valve is set to blow.

**2.13** *Design Pressure* — When the gas pressure exceeds steam pressure, pressure parts which encounter the gas shall have the design pressure 1·05 times the gas pressure specified. For pressure parts which encounter the steam alone, the design pressure is the maximum allowable working pressure ( gauge ) in the steam drum of the boiler.

For once-through forced circulation boilers, the design pressure is the maximum allowable working pressure at the final superheater steam outlet.

**2.14** *Calculation Pressure* — The calculation pressure of any par s the design pressure ( gauge ) adjusted to take into account the pressure drops corresponding to the most severe conditions of pressure drop and hydraulic head.

Boilers Sectional Committee, EDC 40; Basic Parameters and Capacities for Boilers Subcommittee, EDC 40 : 9 [ Ref : Doc : EDC 40 ( 3160 ) ]

Printed at Arcee Press, New Delhi 110055

Adopted 24 December 1979

© February 1980, ISI

Gr 1

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002